

CLAIMS

1. Method for the manufacture of prosthetic/moulded parts for the dental sector, particularly dental frames, with the aid of galvanic metal deposition, in which galvanic deposition at least partly and preferably completely takes place by pulse-plating, characterized in that gold or a gold alloy is deposited and that the percentage pulse duration, based on the total deposition time, is at least 50%.
2. Method according to claim 1, characterized in that galvanic deposition is ended in a time of less than 5 hours, preferably less than 3 hours.
3. Method according to claim 2, characterized in that galvanic deposition is ended within 1 to 2 hours.
4. Method according to one of the preceding claims, characterized in that the percentage pulse duration is at least 70%.
5. Method according to one of the preceding claims, characterized in that square-wave or ramp-shaped current pulses, particularly sharply defined, square-wave current pulses are used.
6. Method according to one of the preceding claims, characterized in that the pulse current density is between 0.2 and 50 A/dm², preferably between 3 and 8 A/dm².
7. Method according to one of the preceding claims, characterized in that the duration of the current pulses and/or current intervals is in the millisecond range.
8. Method according to claim 7, characterized in that the duration of the current pulses is at least 1 ms, preferably between 20 and 100 ms.
9. Method according to claim 7 or 8, characterized in that the duration of the current intervals is at least 1 ms, preferably between 4 and 12 ms.
10. Method according to one of the preceding claims, characterized in that the prosthetic moulded part is deposited with a thickness of at least 100 µm, preferably between 150 and 300 µm.
11. Method according to one of the preceding claims, characterized in that galvanic deposition takes place from an aqueous bath.

12. Method according to one of the preceding claims, characterized in that galvanic deposition takes place from a gold sulphate bath.
13. Method according to one of the preceding claims, characterized in that galvanic deposition takes place from a bath, which contains the metal to be deposited in a higher concentration than conventional baths.
14. Method according to claim 13, characterized in that a gold sulphite bath has a gold concentration of more than 30 g/l and preferably between 40 and 60 g/l.
15. Prosthetic moulded part for the dental sector, particularly dental frame, obtainable according to the method of at least one of the claims 1 to 14.
16. Prosthetic moulded part for the dental sector, particularly dental frame, manufactured according to the method according to at least one of the claims 1 to 14.
17. Prosthetic moulded part according to claim 15 or 16, characterized in that it is veneered with ceramic and/or plastic.
18. Use of pulse-plating for the manufacture of prosthetic moulded parts for the dental sector, characterized by at least one of the features of claims 1 to 14.
19. Electrolytic cell for the manufacture of prosthetic moulded parts for the dental sector with the aid of galvanic metal deposition by pulse current or pulse-plating, particularly for performing the method according to one of the claims 1 to 14, comprising an outer anode (13) constructed in such a way that it at least partly and preferably substantially completely surrounds a cathode (17) to be coated with metal and which can be placed in the electrolytic cell, along a circumferential line enclosing the cathode.
20. Electrolytic cell according to claim 19, characterized in that the outer anode has several anode parts along the circumferential line.
21. Electrolytic cell according to claim 19 or 20, characterized in that the outer anode is cylinder envelope-shaped.
22. Electrolytic cell according to one of the claims 19 to 21, comprising a further, inner anode (16), which is located within the circumferential line defined by the outer anode (13), preferably in such a way that the cathode (17) is located between the outer and the inner anodes.

23. Electrolytic cell according to one of the claims 19 to 22, characterized in that the inner anode (16) is an anode rod, which is preferably centrally positioned within the circumferential line defined by the outer anode.

24. Electrolytic cell according to one of the claims 19 to 23, characterized in that between the outer and/or inner anode and the at least one cathode are provided shielding elements (14, 15), which are preferably constructed as tubular or annular elements.

25. Electrolytic cell according to claim 24, characterized in that the shielding elements are made from plastic, particularly Teflon.